

(12) United States Patent Schoening

(54) ROTARY ACTUATED AXIAL CLAMP

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See application file for complete search history.

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ABSTRACT

Disclosed is a rotary actuated axial clamp that includes a primary fixture, having a rotatable primary clamp, having primary clamp fingers that engage secondary clamp fingers on a stationary secondary clamp. The primary fixture is attached to a positioner, while the secondary fixture is attached to the work piece. Different secondary fixtures can be utilized to fit the shape and size of the work piece, while maintaining a secondary clamp that is able to engage the primary clamp of the primary fixture. The primary fixture can consequently be utilized with numerous different work pieces having different shapes and sizes by simply modifying a secondary fixture to adapt to the size and shape of the work piece. Roller engagement of the primary clamp and secondary clamp reduces the force required to clamp and unclamp the primary and secondary fixtures. This reduces problems associated with attaching a work piece to a positioner.

6 Claims, 14 Drawing Sheets

